



• Teaching • Research • Extension • Departmental Activities

## Outstanding Young Scientist - Dr. Caleb Lemley

Submitted by Dr. John Blanton



Dr. Caleb Lemley will receive the American Society of Animal Science Southern Section's Outstanding Young Scientist award at the Southern Section meeting. If you are attending this year, please join us at the awards ceremony. The meeting is February 4-7, 2017 in Franklin, TN.



Dr. Caleb Lemley

# Beason Family Farm Receives Milk Quality Award

Submitted by **Dr. Amanda Stone**



Six milk quality awards were awarded in Tifton, Georgia on November 16 as part of the Southeast Quality Milk Initiative project. The Southeast Quality Milk Initiative is a five year, six state, USDA-funded project targeted at finding ways to help southeastern dairy producers improve milk quality through cost-effective mastitis prevention and control strategies.

The winner of the Mississippi award was the Beason Family Farm in Philadelphia, owned by Shelby and Marlo Beason. The Beasons milk a grazing herd of 32 Jerseys with a rolling herd average of over 12,000 pounds of milk. Their average somatic cell count for the year preceding this award was 126,000 cells/ mL. The Beasons process their own milk and sell unhomogenized whole, reduced fat, and chocolate milk on-farm, and in several grocery stores and restaurants.

Shelby is a third generation farmer and Marlo has a background in marketing, allowing them to provide a great agri-tourism and educational facility to the local community. The Beasons represent the Mississippi dairy industry well and the award was well-deserved.



# Construction Updates on New Meat Lab

Submitted by Dr. John Blanton





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# Upcoming Extension Events

## Beef Extension – Dr. Brandi Karisch Cobie Rutherford



- **2017 Cattle Industry and NCBA Trade Show on January 31—February 4, 2017 in Nashville, TN**

## Equine Events – Dr. Clay Cavinder



- **Cow Horse and Ranch Handling Clinic**—prepare for competing in 2 new classes at the 2017 State 4H Show. \$30 fee, Lunch is provided.
  - March 17, 2017; 9 am - 3 pm; Montgomery Co. Coliseum, Winona, MS
  - March 18, 2017; 9 am - 3 pm; Lincoln Co. Multipurpose Center, Brookhaven, MS
  - April 1, 2017; 9 am - 3 pm; Chickasaw Co. Agri-Center, Houston, MS
  - May 13, 2017; 9 am - 3 pm; Forrest Co. Multipurpose Center, Hattiesburg, MS
- For more info, contact Dr. Cavinder at [clay.cavinder@msstate.edu](mailto:clay.cavinder@msstate.edu)

## 4-H Events – Dr. Dean Jousan



- **Dixie National Junior Round-Up**, Feb. 2-9, 2017, Jackson, MS
- **Dixie National Sale of Junior Champions**, Feb. 9, 2017, Jackson, MS

## Dairy Events – Dr. Amanda Stone



- **Dairy Science Field Day**: March 17, 2017, Starkville
- **Bearden Dairy Research Center Open House**: May 20, 2017





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## Animal Agriculture in China

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### Program Description:

Stationed at China Agricultural University in Beijing, the capital of the world's second-largest economy (after the US), for 3 weeks, students will learn a great deal of China's animal agricultural practices, animal product consumption patterns, and its veterinary service. Fantastic lectures will be delivered by the top Chinese faculty members and industry leaders in the fields. Experts in the allied American companies in China will also come to the sites to give seminars on their foreign business development and management. Several excursions will be arranged to explore Chinese livestock and poultry farms. In addition, students will be escorted by their Chinese counterparts to experience the country's culture, cuisine, language, and several very attractive sights during this program. In short, this program will provide students with informative, educational, valuable, enjoyable, and memorable international experiences to well prepare them ahead of time for their careers related to animals and animal products.

### Program Dates:

May 8 – May 31, 2017

### Course:

ADS 4990/6990 Special Topics in Animal and Dairy Sciences (3 credit hours)

### Requirements:

All undergraduate and graduate students with at least a 2.5 GPA are welcome to participate in this program, which is especially a great option for those students with animal-related interests not only in the College of Agriculture and Life Sciences but also in the College of Veterinary Medicine. For ADS students this course can be used to meet their major requirement for "Experiential Learning".



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### Application Deadline:

March 3, 2017

### Price: \$1,950 \*

March 3, 2017 - \$150 (non-refundable)

March 17, 2017 - Payment #1: \$900

March 31, 2017 - Payment #2: \$900

\*All program fees are charged to MSU student accounts. Once each payment deadline has passed and the student's account has been charged, the fee is non-refundable.

### Program cost includes:

- International Health and Emergency Assistance insurance
- Lodging
- Some meals
- In-country travel
- Entrance Fees
- 4 Excursions

### Cost does not include:

- MSU Tuition and Fees
- OSA Software Fee (\$28)
- Chinese visa application fee
- International round-trip airfare
- Some meals

For more information contact Program Director :  
Shengfa Liao, s.liao@msstate.edu

Office of Study Abroad

116 Allen Hall

662-325-8929

studyabroad@msstate.edu

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## 2016 Refereed Publications:

- Demarais, S., B. K. Strickland, S. L. Webb, **T. Smith**, and C. McDonald. 2016. Simulated effects of releasing pen-raised deer into the wild to alter population-level Antler Size. *Wildlife Society Bulletin* 40:41-49.
- Michel, E. S., S. Demarais, B. K. Strickland, **T. Smith**, and C. M. Dacus. 2016. Antler characteristics are highly heritable but influenced by maternal factors. *Journal of Wildlife Management* 80:1420-1426.
- Ward L, S Lindsey, J.M. Martin, **M Nicodemus** and **E.Memili**. (2016) Challenges and opportunities in rising feral horse populations. *Professional Animal Scientist* 32:717–724.
- Moura AA and **E. Memili**. (2016) Functional aspects of seminal plasma and sperm proteins and their potential as molecular markers of fertility. *Animal Reproduction*, 13.3, (2016) 191-199.
- Kennedy, V. C. B. R. Mordhorst, J. J. Gaspers, M. L. Bauer, K. C. Swanson, **C. O. Lemley**, and K. A. Vonnahme. Supplementation of corn dried distillers' grains plus solubles to gestating beef cows fed low-quality forage: II. Impacts on uterine blood flow, circulating estradiol-17 and progesterone, and hepatic steroid metabolizing enzyme activity. *Journal of Animal Science*. 2016. 94: 4619-4628.
- Greene, Jonathan M. and **Peter L. Ryan**. L-Arginine in the Uterus and Placenta and During Gestation in Mammals. *L-Arginine in Clinical Nutrition*. 2017. Chapter 22, 285-299.
- Larson, J.E.** Incorporating Writing-to-Learn Strategies into an Animal Reproduction Course. *NACTA Journal*, September 2016, Vol 60(3), 303-306.
- Lamb, G. C., PAS, V. R. G. Mercadante, D. D. Henry, P. L. P. Fontes, C. R. Dahlen, **J. E. Larson**, and N. DiLorenzo. Invited Review: Advantages of current and future reproductive technologies for beef cattle production. *The Professional Animal Scientist* 32 (2016):162–171; <http://dx.doi.org/10.15232/pas.2015-01455>.
- Regmi, Naresh, Taiji Wang, **Mark A. Crenshaw**, **Brian J. Rude**, Guoyao Wu, **Shengfa F. Liao**. Effects of dietary lysine levels on plasma free amino acid profile in late-stage finishing pigs. *SpringerPlus* (2016) 5:888, DOI 10.1186/s40064-016-2463-3.
- Mayer, J. J., J. D. Davis, J. L. Purswell, E. J. Koury, N. H. Younan, **J. E. Larson**, and T. M. Brown-Brandl. 2016. Development and characterization of a continuous tympanic temperature logging (CTTL) probe for bovine animals. *Transactions of the ASABE*. 59:703-714. (DOI: 10.13031/trans.59.11367).
- Gilfeather, CL and **CO Lemley**. 2016. Effects of Interferon-Tau and Steroids on Cytochrome P450 Activity in Bovine Endometrial Epithelial Cells. *Reproduction in Domestic Animals*, 51, 415–420 (2016); doi: 10.1111/rda.12695.
- Prezotto, L. D., L. E. Camacho, **C. O. Lemley**, F. E. Keomanivong, K. A. Vonnahme and K. C. Swanson, J. S. Caton. Nutrient restriction and realimentation in beef cows during early and mid-gestation and maternal and fetal hepatic and small intestinal in vitro oxygen consumption. *The Animal Consortium* 2015. doi:10.1017/S1751731115002645.

- Ye, G., J. Liu, Y. Liu, X. Chen, **S. F. Liao**, D. Huang, and K. Huang. 2016. Feeding glycerol-enriched yeast culture improves lactation performance, energy status, and hepatic gluconeogenic enzyme expression of dairy cows during the transition period. *J. Anim. Sci.* doi: 10.2527/jas.2015-0021.
- Cline, G. F., A. M. Muth-Spurlock, B. E. Voelz, **C. O. Lemley**, and **J. E. Larson**. 2016. Evaluating blood perfusion of the corpus luteum in beef cows during fescue toxicosis. *J. Anim. Sci.* 94:90-95.
- Brockus, K. E., C. G. Hart, C. L. Gilfeather, B. O. Fleming, **C. O. Lemley** (2016). Dietary melatonin alters uterine artery hemodynamics in pregnant Holstein heifers. *Domestic Animal Endocrinology*, 55, 1-10.
- Kaya, A., **E. Memili**. Sperm macromolecules associated with bull fertility. *Animal Reproduction Science*. (2016), <http://dx.doi.org/10.1016/j.anireprosci.2016.02.015>
- Hunt, M.R., J.F.Legako, **T.T.N. Dinh**, A.J.Garmyn, T.G.O'Quinn, C.H. Corbin, R.J. Rathmann, J.C. Brooks, M.F. Miller. Assessment of volatile compounds, neutral and polar lipid fatty acids of four beef muscles from USDA Choice and Select graded carcasses and their relationships with consumer palatability cores and intramuscular fat content. *Meat Science* 116 (2016) 91–101.
- Keomanivong, F. E., **C. O. Lemley**, L. E. Camacho, R. Yunusova, P. P. Borowicz, J. S. Caton, A. M. Meyer, K. A. Vonnahme and K. C. Swanson. Influence of nutrient restriction and melatonin supplementation of pregnant ewes on maternal and fetal pancreatic digestive enzymes and insulin-containing clusters. *Animal* (2016), 10:3, pp 440–448.
- Brockus, KE, CG Hart, BO Fleming, T Smith, **SH Ward** and **CO Lemley**. Effects of Supplementing Holstein Heifers with Dietary Melatonin during Late Gestation on Growth and Cardiovascular Measurements of their Offspring. *Reproduction in Domestic Animals*. 51, 240–247 (2016); doi: 10.1111/rda.12672 ISSN
- Vasquez, Erick S., **Jean M. Feugang**, **Scott T. Willard**, **Peter L. Ryan** and Keisha B. Walters. Bioluminescent magnetic nanoparticles as potential imaging agents for mammalian spermatozoa. *Journal of Nanobiotechnology*. (2016) 14:20.

## 2016 Book Chapters:

- Kutchy NA, Kaya A, Moura A, **Memili E**. (2016) Sperm chromatin dynamics associated with male fertility in mammals. In *Animal Models and Human Reproduction*, Chapter 16, First Edition. Edited by Heide Schatten and Gheorghe M. Constantinescu. Wiley & Sons, Inc. Published 2017 by John Wiley & Sons, Inc.
- Velho ALC, R Oliveira, T Dinh, A Moura, A Kaya, and E Memili. (2016) Applications of metabolomics in reproductive biology. In *Animal Models and Human Reproduction*, Chapter 20. Ed. Heide Schatten and George Constantinescu. John Wiley & Sons, Inc.